



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,400	11/14/2005	Werner Bieck	ETF-0026	3430

23413 7590 01/25/2007  
CANTOR COLBURN, LLP  
55 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

EXAMINER
----------

ANGLO, LHEIREN MAE ACOSTA

ART UNIT	PAPER NUMBER
----------	--------------

2832

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/538,400	BIECK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lheiren Mae A. Anglo	2832	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050609</u> .                                                | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 18 is objected to because of the following informalities: a colon is missing at the end of line 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-12, 14-25 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki et al. [Yamazaki hereinafter, US 6,344,623].

In regard to claim 8, Yamazaki teaches in [Fig. 3b] a foil-type switching element comprising: a first carrier foil [3] and a second carrier foil [3] arranged at a certain distance from each other by means of a spacer [1], the spacer comprising at least one recess defining an active area of the switching element, and at least two electrodes [2] arranged in the active area of the switching element between the first and second carrier foils in such a way that, in response to a pressure acting on the active area of the switching element, the first and second carrier foils are pressed together against

Art Unit: 2832

reaction force of the elastic carrier foils and an electrical contact is established between the at least two electrodes, the foil-type switching element further comprising a layer of dielectric material [4], the dielectric material being applied onto the first carrier foil between the first carrier foil and an electrode arranged on the first carrier foil, the layer of dielectric material covering at least a region of the first carrier foil which is delimited by a generally outer periphery of the electrode arranged on the first carrier foil.

In regard to claim 9, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied onto the second carrier foil between the second carrier foil and an electrode arranged on the second carrier foil.

In regard to claim 10, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the first carrier foil in substantially an entire area of the active area.

In regard to claim 11, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the first carrier foil in an entire area of the active area and extends laterally beyond the active area.

In regard to claim 12, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the first carrier foil on a complete surface of the carrier foil.

In regard to claim 14, Yamazaki teaches in [Fig. 3b] that the thickness of the layer of dielectric material varies over the active area.

In regard to claim 15, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the second carrier foil in substantially an entire area of the active area.

In regard to claim 16, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the second carrier foil in an entire area of the active area and extends laterally beyond the active area.

In regard to claim 17, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the second carrier foil on a complete surface of the carrier foil.

In regard to claim 18, Yamazaki teaches in [Fig. 3b] a foil-type switching element comprising: a first carrier foil [3] and a second carrier foil [3] arranged at a certain distance from each other by means of a spacer [1], the spacer comprising at least one opening defining an active area of the switching element, and at least two electrodes [2] arranged in the active area of the switching element between the first and second carrier foils in such a way that, in response to a pressure acting on the active area of the switching element, the first and second carrier foils are pressed together against reaction force of the elastic carrier foils and an electrical contact is established between the at least two electrodes, wherein at least one of the electrodes is arranged on the first carrier foil, the foil-type switching element further comprising a layer of dielectric material [4], the dielectric material being applied onto the first carrier foil between the first carrier foil and the electrode arranged on the first carrier foil, the layer of dielectric material covering at least a region of the first carrier foil which is delimited by a generally outer periphery of the electrode arranged on the first carrier foil.

In regard to claim 19, Yamazaki teaches in [Fig. 3b] that at least one of the electrodes is arranged on the first carrier foil and wherein a layer of dielectric material is arranged on the first carrier foil and wherein a layer of dielectric material is applied onto

Art Unit: 2832

the second carrier foil between the second carrier foil and an electrode arranged on the second carrier foil.

In regard to claim 20, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the first carrier foil in substantially an entire area of the active area.

In regard to claim 21, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the first carrier foil in an entire area of the active area and extends laterally beyond the active area.

In regard to claim 22, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the first carrier foil on a complete surface of the carrier foil.

In regard to claim 23, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the second carrier foil in substantially an entire area of the active area.

In regard to claim 24, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the second carrier foil in an entire area of the active area and extends laterally beyond the active area.

In regard to claim 25, Yamazaki teaches in [Fig. 3b] that the layer of dielectric material is applied on the second carrier foil on a complete surface of the carrier foil.

In regard to claim 27, Yamazaki teaches in [Fig. 3b] that the thickness of the layer of dielectric material varies over the active area.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. [Yamazaki hereinafter, US 6,344,623] in view of Koyama et al. [Koyama hereinafter, US 6,634,090]. Yamazaki teaches the dielectric material in [Fig. 3b] being positioned on the carrier foil. Yamazaki does not teach that the dielectric material is printed. Koyama teaches in the [ABSTRACT] that the dielectric material is printed. It would have been obvious to one of ordinary skill in the art at the time of the invention to print the dielectric material onto the carrier foil in order to efficiently assemble the switching elements.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lheiren Mae A. Anglo whose telephone number is (571) 272-2730. The examiner can normally be reached on Monday to Friday 8:00 am to 4:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Ima

Lheiren Mae A. Anglo  
Examiner  
AU 2832

  
ELVIN ENAD  
SUPERVISORY PATENT EXAMINER  
17 JAN 09